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### (54) MUSIC NAME RETRIEVING METHOD AND DEVICE

#### (57)Abstract:

PROBLEM TO BE SOLVED: To provide a music name retrieving method and device capable of easily retrieving a music name by using a communication terminal.

SOLUTION: Since the music name broadcasted at the time is retrieved and is displayed on the communication terminal by a music name retrieving display means 64 on the basis of the time when determining that access is made for retrieving the music name from a cellular phone 12 by a music name retrieving access determining means 52 from a broadcasting program prestored in a broadcasting program storage means 50when broadcasting music of the music name desired to knowthe broadcasting music name can be easily retrieved by using the cellular phone 12 by making access from the cellular phone 12.

## **CLAIMS**

#### [Claim(s)]

[Claim 1]It is a track name search method for searching a track name of music currently broadcast according to a broadcast program defined beforehand from a broadcasting station using a communication terminalA track name search method searching a track name currently broadcast at this time based on time when access for track name search was performed from said communication terminal from a broadcast program memorized beforehandand making it display on this communication terminal.

[Claim 2]A broadcasting station name while broadcasting said music at time when access for track name search was performed from said communication terminal is displayed on said communication terminal track name search method of Claim 1 searching a track name based on a broadcasting station name by which selection operation was carried out with this communication terminal from a broadcasting station name displayed on this communication terminal making it display on this communication terminal.

[Claim 3]A location area of this communication terminal when accessed for track name search is determined based on a receiving station which received a signal from this communication terminal from said communication terminalA track name search method of Claim 2 which is what displays on this communication terminal said broadcasting station name determined based on this location area from station name information memorized beforehand.

[Claim 4] Claim 2 or 3 track name search methods which are what displays on said communication terminal a kind of broadcasting medium which is the target of track name searchand displays on this communication terminal said broadcasting station name belonging to a kind of broadcasting medium by which the selection input was carried out from this communication terminal.

[Claim 5]A broadcast program memory measure which is a track name retrieval device for searching a track name of music currently broadcast according to a broadcast program defined beforehand from a broadcasting station using a communication terminaland memorizes beforehand a broadcast program broadcast from a broadcasting stationA track name search access decision means which judges whether access for track name search from said communication terminal was performedAn access time memory measure which memorizes access time when judged with access for track name search from said communication terminal having been performed by this track name search access decision meansA track name retrieval device including a track name search displaying means which searches a track name currently broadcast at this access time based on access time memorized by said access time memory measure from a broadcast program memorized by said broadcast program memory measureand is displayed on said communication terminal.

[Claim 6]A broadcasting station name search displaying means which searches a broadcasting station name while broadcasting music based on time when track name search access was performed from said communication terminal from a broadcast program memorized beforehandand is displayed on this communication terminalA broadcasting station name input judging means which judges whether an input which specifies a broadcasting station name it was broadcast that music which asks for track name search from a broadcasting station name displayed on this communication terminal was was performedA track name retrieval device of Claim 5 which is what an implication and said track name search displaying means search a track name currently broadcast at said access time based on a broadcasting station name by which the designation input was carried out with this communication terminaland is displayed on this communication terminal.

[Claim 7]Said broadcasting station name search displaying means determines a location area of this communication terminal when accessed for track name

search based on a receiving station which received a signal from this communication terminal from said communication terminalA track name retrieval device of Claim 6 which is what displays on this communication terminal said broadcasting station name determined based on this location area from station name information memorized beforehand.

[Claim 8] Claim 6 or 7 track name retrieval devices which are what displays on this communication terminal said broadcasting station name which belongs to a kind of broadcasting medium with which the selection input of said broadcasting station name search displaying means was carried out from this communication terminal including a broadcasting—medium displaying means which displays on said communication terminal two or more kinds of broadcasting media which are the targets of track name search.

[Claim 9]In a location area of this communication terminal when accessed for track name search from said communication terminalwhen a broadcasting station while broadcasting music is a single office irrespective of a kind of broadcasting mediumA track name retrieval device of Claim 8 which is what includes a single office judging means which makes said communication terminal display a track name on said track name search displaying means without displaying a broadcasting station name on said broadcasting station name search displaying means at least.

## **DETAILED DESCRIPTION**

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention answers access for the track name search from a communication terminal and relates to the track name search method and device on which it was made to display the track name of the music under broadcast.

[0002]

[Description of the Prior Art]While listening to music through television broadcastinga radio broadcastbroadcast by CATVcable broadcastingetc.a melodyWhen words or an impression good about a singer is received or impression is received or order to get CD and the tape in which the music was recorded and to playhe would like to know the track name and it becomes in many cases. [0003]Howeveralthough the race card (program) of the broadcasting station needed to be ordered and the track name needed to be looked for in the former based on a broadcasting station name or broadcast timesin the race card indicated in the newspaper etc.it was not indicated in detail and a track name was not able to be known easily in many cases.

[0004]On the other handalthough a track name can be easily known in a teletextThe television and radio only for a teletext had to be prepared beforehandand even if the use is difficult in many cases and has prepared the

television and radio only for a teletexthere was a fault that the track name of the music in the general broadcast which does not perform a teletext could not be known.

[0005] There is a place which succeeds in this invention against the background of the above situationand is made into the purpose in providing the track name search method and device with which a track name can be easily searched using a communication terminal.

[0006]

[The 1st means for solving SUBJECT] The place made into the gist of this method invention for attaining this purposelt is a track name search method for searching the track name of the music currently broadcast according to the broadcast program defined beforehand from the broadcasting station using a communication terminalThe track name currently broadcast at the time based on the time when access for track name search was performed from said communication terminal is searched from the broadcast program memorized beforehandand it is in making it display on this communication terminal.

[0007]

[The 1st effect of the invention] Since the track name currently broadcast at the time based on the time when access for track name search was performed from said communication terminal will be searched and it will be displayed on the communication terminal from the broadcast program memorized beforehand if it does in this wayWhen the music of the track name to know is broadcastby accessing from a communication terminalthe track name under broadcast can be easily searched using a communication terminal.

[0008]

[Other modes of the 1st invention] A broadcasting station name while broadcasting said music suitably here at the time when access for track name search was performed from said communication terminal is displayed on said communication terminalA track name is searched based on the broadcasting station name by which selection operation was carried out with this communication terminal from the broadcasting station name displayed on the communication terminaland it is made to display on the communication terminal. Since the broadcasting station name displayed on a communication terminal will be extracted from a communication terminal to a broadcasting station name while broadcasting music at the time when access for track name search was performed if it does in this waythe display of the broadcasting station name in a communication terminal and selection of a broadcasting station name become easy.

[0009] The location area of this communication terminal when accessed for track name search is suitably determined based on the receiving station which received the signal from the communication terminal from said communication terminal Said broadcasting station name determined based on this location area from the station name information memorized beforehand is displayed on the communication terminal. Since the broadcasting station name displayed on a communication

terminal will be extracted to the broadcasting station name which makes the location area of the communication terminal the broadcast range (area) if it does in this waythe display of the broadcasting station name in a communication terminal and selection of a broadcasting station name become easy. [0010] The kind of broadcasting medium which is the target of track name search is suitably displayed on said communication terminaland said broadcasting station name belonging to the kind of broadcasting medium by which the selection input was carried out from the communication terminal is displayed on the communication terminal. Since the broadcasting station name displayed on a communication terminal will be extracted to the broadcasting station name in the broadcasting medium which is the target of track name search if it does in this waythe display of the broadcasting station name in a communication terminal and selection of a broadcasting station name become easy.

[0011]

[The 2nd means for solving SUBJECT] The place made into the gist of the device invention for carrying out said method invention suitablyIt is a track name retrieval device for searching the track name of the music currently broadcast according to the broadcast program defined beforehand from the broadcasting station using a communication terminal(a) The broadcast program memory measure which memorizes beforehand the broadcast program broadcast from a broadcasting station(b) The track name search access decision means which judges whether access for the track name search from said communication terminal was performed(c) The access time memory measure which memorizes access time when judged with access for the track name search from said communication terminal having been performed by the track name search access decision means(d) Be in including the track name search displaying means which searches the track name currently broadcast at this access time based on the access time memorized by said access time memory measure from the broadcast program memorized by said broadcast program memory measure. [0012]

[The 2nd effect of the invention] If it does in this wayfrom the broadcast program beforehand memorized by the broadcast program memory measure. Based on time when judged with access for track name search having been performed by the track name search access decision means from said communication terminalSince the track name currently broadcast by the track name search displaying means at the time is searched and it is displayed on the communication terminalwhen the music of the track name to know is broadcastthe track name under broadcast can be easily searched by accessing from a communication terminal using a communication terminal.

#### [0013]

[Other modes of the 2nd invention] The broadcasting station name search displaying means which searches a broadcasting station name while broadcasting music suitably here based on the time when track name search access was performed from said communication terminal from the broadcast program

memorized beforehandand is displayed on the communication terminalThe broadcasting station name input judging means which judges whether the input which specifies the broadcasting station name it was broadcast that the music which asks for track name search from the broadcasting station name displayed on the communication terminal was was performedIt hasand a track name search displaying means searches the track name currently broadcast at said access time based on the broadcasting station name by which the designation input was carried out with the communication terminaland is made to display it on the communication terminal. Since the broadcasting station name displayed on a communication terminal will be extracted from a communication terminal to a broadcasting station name while broadcasting music at the time when access for track name search was performed if it does in this waythe display of the broadcasting station name in a communication terminal and selection of a broadcasting station name become easy.

[0014] Suitably said broadcasting station name search displaying meansSaid broadcasting station name which determined the location area of this communication terminal when accessed for track name search based on the receiving station which received the signal from this communication terminal from said communication terminaland was determined based on this location area from the map memorized beforehand is displayed on this communication terminal. Since the broadcasting station name displayed on a communication terminal will be extracted to the broadcasting station name which makes the location area of the communication terminal the broadcast range (area) if it does in this waythe display of the broadcasting station name in a communication terminal and selection of a broadcasting station name become easy.

[0015] Said broadcasting station name search displaying means displays on the communication terminal said broadcasting station name belonging to the kind of broadcasting medium by which the selection input was carried out from this communication terminal including the broadcasting-medium displaying means which displays on said communication terminal suitably two or more kinds of broadcasting media which are the targets of track name search. Since the broadcasting station name displayed on a communication terminal will be extracted to the broadcasting station name in the broadcasting medium which is the target of track name search if it does in this waythe display of the broadcasting station name in a communication terminal and selection of a broadcasting station name become easy.

[0016] Suitablyin the location area of this communication terminal when accessed for track name search from said communication terminalwhen a broadcasting station while broadcasting music is a single office irrespective of the kind of broadcasting medium The single office judging means which displays a track name on said communication terminal is further included in said track name search displaying means without displaying a broadcasting station name on said broadcasting station name search displaying means at least. If it does in this wayon the occasion of the track name retrieving operation by the side of a

communication terminalthere is an advantage which becomes unnecessary [ the display of a broadcasting station name and its retrieving operation ] at least. [0017]

[The suitable embodiment of an invention] Hereafterworking example of this invention is described in detailreferring to Drawings.

[0018] Drawing 1 is a figure explaining the composition of the information service system containingone working example 10i.e.the track name retrieval deviceof a device for performing the information service method of one working example of this invention. In drawing 1 exchange or connection of the portable telephone 12 is controlled by the telecommunications company 16 which many portable telephones 12 which function also as a communication terminal were connected to the communication channel of radio via two or more relay base offices 14and was connected to two or more of the relay base offices 14. The server 22 of the information service company called a provider etc. is connected to this telecommunications company 16 via the public networks 20 which have a function checked by translating pro Kotorsuch as Gateway 18a cableradioand the Internet. This information service company provides the information on music datasuch as karaoke playing music and music for cellular-phone arrival informationetc. [0019]While the above-mentioned portable telephone 12 is provided with two or more keys 24 and displays for indication 26 and communication is made possible by the contract with a cellular phone companyUID (a user identification numberfor examplea telephone number) is attached. When two or more above-mentioned keys 24 input the telephone number of a communications partnerit is used when carrying out a track name search inputand the broadcasting station specification menu for the broadcasting-medium specification menu for the telephone number of the communications partner which inputted the above-mentioned display for indication 26and track name searchand track name searchtrack name search resultsetc. are displayed.

[0020] The server 22 of the above-mentioned information service company is constituted like what is called a microcomputer that has CPUROMRAMan I/O interfaceetc.

Have the memory storage 28 which comprises HDD (hard disk) in order to memorize the database (DB) which memorized various information of examplein a track name search service. The signal from the portable telephone 12 by the track name retrieving operation from the portable telephone 12 is processed the station name of the music currently broadcast in track name retrieving time is searched automatically and search results are displayed on the portable telephone 12.

An information service company places an order for CD etc. in which the music of the track name was memorized according to the purchase instructions from the portable telephone 12 and charges the owner of the portable telephone 12.

[0021]A member's user ID beforehand registered into the above-mentioned memory storage 28 the charge or for nothing (a membership number or a portable telephone number) The member storage area (the membership database DBi.e.a member) 30 which makes a nameagean occupationan addressthe flag that shows

the existence of admissionetc. correspond mutually and memorizes them The broadcasting station storage area (the broadcasting station data base DBi.e.a broadcasting station) 32 which makes broadcasting station ID which shows a broadcasting stationlocal ID which shows the location area of the broadcasting stationthe broadcasting medium which the broadcasting station usesa broadcasting station nameetc. correspond mutuallyand memorizes themRelay base office ID which shows the relay base office 14 of the portable telephone 12its relay base station nameThe relay base office storage area (the relay base office database DBi.e.a relay base office) 34 which makes local ID etc. which show the receiving area of the relay base officei.e.the location area of the portable telephone 12correspond mutuallyand memorizes themThe program storage area (the program database DBi.e.a program) 36 which makes program ID which shows the program according to each broadcasting stationthe broadcasting date of the programa program namethe content ID that specifies the contents of the programetc. correspond mutually and memorizes them The above-mentioned content IDa track namea singer namea songwritera composera release datea ringtone flagThe contents storage area (the contents database DBi.e.contents) 38 which makes a lyrics flag etc. correspond mutually and memorizes them is formedrespectively. <u>Drawing 2drawing 3dr</u>awing 4drawing 5and drawing 6 illustrate above-mentioned member DB30broadcasting station DB32relay base office DB34program DB36and contents DB38respectively.

[0022] Drawing 7 is a functional block diagram explaining the important section of a control facilityi.e.the offer-of-information control facilityof the above-mentioned server 22. In drawing 7this server 22 searched automatically the track name of the music currently broadcast according to the broadcast program beforehand defined from the broadcasting station according to access for the track name search from the predetermined communication terminal 12and is provided with the function to display search results on that predetermined communication terminal 12. Firstthe broadcast program memory measure 50 corresponds to said memory storage 28. A broadcast program (program) including contents of broadcastsuch as broadcast times broadcast from two or more broadcasting stations which carry out the whereabouts to an every place regionis memorized beforehandand it memorizes as broadcasting station DB32relay base office DB34program DB36and contents DB38. The track name search access decision means 52 judges whether access for the track name search from the predetermined portable telephone 12 was performed based on the signal from the portable telephone 12. The search information storage means 54 which functions also as an access time memory measure etc.When judged with access for the track name search from the above-mentioned predetermined portable telephone 12 having been performed by the abovementioned track name search access decision means 52The access timelocal ID decided based on the relay base office 14 which received the electric wave of the predetermined portable telephone 12and the user ID of the predetermined portable telephone 12 are memorized to the memory storage 28.

[0023] Since the broadcasting-medium displaying means 56 makes the

broadcasting medium which the owner of the predetermined portable telephone 12 who demanded track name search was hearing inputas shownfor example in the screen of drawing 8 it displays on the portable telephone 12 two or more kinds of broadcasting media which are the targets of track name search and which were memorized beforehand. The broadcasting-medium input judging means 58 judges whether the input which specifies the broadcasting medium with which the music which asks for track name search from the inside of the broadcasting medium displayed on the above-mentioned predetermined portable telephone 12 was broadcast from the portable telephone 12 was performed.

[0024]If it is judged that the broadcasting medium with which the music which asks for track name search from the inside of the above-mentioned broadcasting medium by the above-mentioned broadcasting-medium input judging means 58 was broadcast was inputted from the portable telephone 12the broadcasting station name search displaying means 60The time when said predetermined portable telephone 12 to track name search access was performed from said broadcast program memorized beforehandIt is made to display on the abovementioned predetermined portable telephone 12as a broadcasting station name while broadcasting music from the broadcasting station using the broadcasting medium is searched based on the broadcasting medium inputted [ abovementioned ] and local ID contained in the information from the portable telephone 12for exampleit is shown in the screen of drawing 9. The broadcasting station name input judging means 62 judges whether the input which specifies the broadcasting station name it was broadcast that the music which asks for track name search from two or more broadcasting station names displayed on the above-mentioned portable telephone 12 was was performed from the abovementioned portable telephone 12.

[0025]If it is judged that the broadcasting station name it was broadcast that the music which searches for a track name by the above-mentioned broadcasting station name input judging means 62 was was inputted the track name search displaying means 64From the broadcast program memorized by the search information memorized by the search information storage means 54 and the broadcast program memory measure 50. Search results are displayed on the above-mentioned predetermined portable telephone 12as the track name currently broadcast at the access time based on search informationincluding the inputted broadcasting station namethe access time memorized by said access time memory measureetc.is searchedfor exampleit is shown in the screen of drawing 10. When operation of requiring the words of the track name already searched by the portable telephone 12 using the screen of drawing 10 is performed the track name search displaying means 64 is displayed on the portable telephone 12as the words are searched from another file which is not illustrated for exampleit is shown in drawing 11.

[0026] In the location area of the communication terminal 12 when access for track name search is performed from the predetermined communication terminal 12 when a broadcasting station while broadcasting music is a single office irrespective of

the kind of broadcasting mediumthe single office judging means 66The above—mentioned communication terminal 12 is made to display a search track name on said track name search displaying means 64without [ without it displays a broadcasting medium on said broadcasting—medium displaying means 56and ] displaying a broadcasting station name on said broadcasting station name search displaying means 60.

[0027] Drawing 12 and drawing 13 are the flow charts explaining the routine which performs the important sectioni.e. the track name search service of control actuation of said information service company. [ of the server 22 ] Repeat execution of this routine is carried out every several milliseconds. [0028] In drawing 12 and drawing 13 it is judged at Step (a step is skipped hereafter) S1 corresponding to said track name search access decision means 52 whether there was any access for track name search from the predetermined portable telephone 12. When this judgment of S1 is deniedafter other processings are performed this routine is repeated but. When this judgment of S1 is affirmed in S2 corresponding to said search information storage means 54 search information including the user ID of the predetermined portable telephone 12 with access relay base office IDaccess timeetc. is memorized.

[0029] Nextin S3 corresponding to said single office judging means 66. In the location area of the communication terminal 12 when access for track name search is performed from the above-mentioned predetermined communication terminal 12whether a broadcasting station while broadcasting music is a single office irrespective of the kind of broadcasting medium. Based on relay base office IDaccess timeetc.it judges from the broadcast program which exists in an every place region and which was beforehand memorized for every broadcasting station. Namelythis judgment searches relay base office DB34 based on relay base office IDand acquires local IDNextprogram DB36 of each broadcasting station which searched broadcasting station DB32 based on local IDand acquired the broadcasting station nameand also was acquired is searched with access timeand when the number of broadcasting stations while broadcasting music broadcast at the access time is one judgment of S3 is affirmed. When the broadcasting station where this judgment of S3 is affirmed and which case [ a broadcasting station ] namelycorresponds is a single officeLess than S8 is made to carry out immediate execution so that a track name may be displayed without [ without it displays a broadcasting medium in S4 corresponding to the broadcasting-medium displaying means 56and ] displaying a broadcasting station name in S6 corresponding to the broadcasting station name search displaying means 60. Howeverwhen judgment of the above S3 is denied (i.e.when there are two or more broadcasting stations)sequential execution below of S4 is carried out.

[0030]In S4 corresponding to said broadcasting-medium displaying means 56. In order to make the broadcasting medium which the broadcasting station which the owner of the predetermined portable telephone 12 who demanded track name search was hearing used inputas shownfor example in the screen of <u>drawing 8</u>two or more kinds of broadcasting media which are the targets of track name search

and which were memorized beforehand are displayed on the portable telephone 12. Subsequentlyin S5 corresponding to said broadcasting-medium input judging means 58it is judged whether there was any input of a broadcasting medium from the above-mentioned predetermined portable telephone 12. This input is performed based on moving the cursor K of frame shape on a predetermined broadcasting-medium namefor example. While this judgment of S5 is deniedare made to stand bybut. In S6 corresponding to said broadcasting station name search displaying means 60 if the judgment of S5 is affirmedThe time when said predetermined portable telephone 12 to track name search access was performed from said broadcast program (broadcasting station DB32relay base office DB34) memorized beforehandIt is made to display on the above-mentioned predetermined portable telephone 12as two or more broadcasting station names while broadcasting music from the broadcasting station using the broadcasting medium are searched based on the broadcasting medium inputted [ abovementioned ] and local ID contained in the signal from the portable telephone 12for exampleit is shown in the screen of drawing 9. That is the broadcasting station name which searches broadcasting station DB32 and corresponds based on the broadcasting medium which searched relay base office DB34 based on relay base office IDand acquired local IDnext was specified as local ID is acquired and it is made to display on the above-mentioned predetermined portable telephone 12. Subsequentlyin S7 corresponding to said broadcasting station name input judging means 62it is judged whether the input which specifies the broadcasting station name it was broadcast that the music which asks for track name search from two or more broadcasting station names displayed on the above-mentioned portable telephone 12 was was performed from the above-mentioned portable telephone 12. [0031] While judgment of the above S7 is deniedare made to stand bybut. In S8 corresponding to said track name search displaying means 64 if the judgment of S7 is affirmedFrom program DB36 of a broadcasting station applicable out of the broadcast program (program DB36) beforehand memorized according to each broadcasting station. Search results are displayed on the above-mentioned predetermined portable telephone 12as the track name currently broadcast at the access time based on the time when track name search access was performed from said predetermined portable telephone 12 is searchedfor exampleit is shown in the screen of drawing 10. Subsequentlyin S9it is judged whether the service relevant to the search track name displayed in the screen of drawing 10 was chosen. When judgment of this S9 is affirmedit is judged in S10 whether it is pay service. When this judgment of S10 is denied (for examplewhen karaoke JOY song selection number gratis ticket guidanceguidance of CDor service is chosen and it is)in S12 corresponding to said track name selection display means 64the free service judged by S9 is displayed on the portable telephone 12. [0032]Howeverwhen judgment of the above S10 is affirmedfor example picture the words of a search track namedownload of a ringtoneor service is chosenin S11it is judged from member DB30 whether you are the member. Since this judgment of S11 is affirmed when it is the memberin the above S12words are displayed on the

portable telephone 12 as those words searched from another file which is not illustrated for exampleshown in <u>drawing 11</u>.

[0033]When judgment of said S9 is denied (i.e.when the service relevant to the search track name displayed in the screen of <u>drawing 10</u> is not chosen). In S14although it is the same broadcasting station where the music of the search track name was broadcastit is judged whether the information on the track name broadcast in the time zone before and behind track name search access time was searched for by the portable telephone 12. When this judgment of S14 is affirmedinformationincluding the track name etc. which were broadcast in the time zone before and behind the above-mentioned track name search access time is displayed on the portable telephone 12. Howeverwhen the above-mentioned judgment of S14 is denied in S15it is judged whether end operation was performed by the portable telephone 12. This end operationsaid selection operationetc. are performed based on moving the cursor K of frame shape.

[0034]As mentioned aboveaccording to this examplefrom the broadcast program beforehand memorized by the broadcast program memory measure 50. Based on time when judged with access for track name search having been performed by the track name search access decision means 52 from the portable telephone 12Since the track name currently broadcast by the track name search displaying means 64 (S8) at the time is searched and it is displayed on the communication terminalWhen the music of the track name to know is broadcastby accessing from the portable telephone 12the track name under broadcast can be easily searched using the portable telephone 12.

[0035]The broadcasting station name search displaying means 60 (S6) which according to this example searches two or more broadcasting station names while broadcasting music based on the time when track name search access was performed from the portable telephone 12 from the broadcast program memorized beforehandand is displayed on the portable telephone 12The broadcasting station name input judging means 62 (S7) which judges whether the input which specifies the broadcasting station name it was broadcast that the music which asks for track name search from the broadcasting station name displayed on the portable telephone 12 was was performedHave and the track name search displaying means 64 (S8)The track name currently broadcast at track name search access time based on the broadcasting station name by which the designation input was carried out with the portable telephone 12 is searchedSince it is made to display on the portable telephone 12 and the broadcasting station name displayed on the portable telephone 12 is extracted from the portable telephone 12 to a broadcasting station name while broadcasting music at the time when access for track name search was performedThe display of the broadcasting station name in the portable telephone 12 and selection of a broadcasting station name become easy.

[0036] According to this examplesaid broadcasting station name search displaying means 64 (S8) The location area of the portable telephone 12 when accessed for track name search is determined based on the relay base office (receiving station)

which received the signal from the portable telephone 12 from said portable telephone 12From it being what displays said two or more broadcasting station names on the portable telephone 12 from the inside of the broadcasting station determined based on the location area from the map (relay base office DB34) as station name information memorized beforehand. Since the broadcasting station name displayed on the portable telephone 12 is extracted to the broadcasting station name which makes the location area of the portable telephone 12 the broadcast range (area)the display of the broadcasting station name in the portable telephone 12 and selection of a broadcasting station name become easy. [0037]According to this examplethe broadcasting-medium displaying means 56 (S4) which displays on said portable telephone 12 two or more kinds of broadcasting media which are the targets of track name search is includedSaid broadcasting station name search displaying means 60 (S6) two or more broadcasting station names from it being what is displayed on the portable telephone 12 out of the broadcasting station belonging to the kind of broadcasting medium by which the selection input was carried out from the portable telephone 12. Since the broadcasting station name displayed on the portable telephone 12 is extracted to the broadcasting station name in the broadcasting medium which is the target of track name searchthe display of the broadcasting station name in the portable telephone 12 and selection of a broadcasting station name become easy. [0038] According to this example in the location area of the portable telephone 12 when accessed for track name search from said portable telephone 12when a broadcasting station while broadcasting music is a single office irrespective of the kind of broadcasting mediumWithout displaying a broadcasting station name on the broadcasting station name search displaying means 60without displaying a broadcasting medium on the broadcasting-medium displaying means 56Since the single office judging means 66 (S3) which makes the above-mentioned predetermined portable telephone 12 display a track name on the track name search displaying means 64 is included furtheron the occasion of the track name retrieving operation by the side of the portable telephone 12there is an advantage from which the display of a broadcasting mediumits selection operationand the display of a broadcasting station name and its retrieving operation become unnecessary.

[0039]As mentioned abovealthough one working example of this invention was described based on Drawingsthis invention is applied also in other modes. [0040]For examplesome storage configurations of those information are variousand above-mentioned working example does not necessarily take five kinds of databasesalthough five kinds of databases shown in drawing 2 thru/or drawing 6 were used.

[0041] Although the searched track name is displayed and the service relevant to it is chosen in the screen of <u>drawing 10</u> of above-mentioned working examplemay be made to provide the information for example the singer name etc.relevant to the searched track name etc.

[0042] Although the portable telephone 12 was used as a communication terminal

in above-mentioned working examplethey may be other communication terminals in which the personal computer and the computer were incorporated such as radio and television.

[0043] Although the composition and an operation of the server 22 of the information service company called a provider etc. were explained by above—mentioned working exampleit may be the server provided in other places in a telecommunications company etc.

[0044] When a broadcasting station while broadcasting music was a single office irrespective of the kind of broadcasting mediummade it display a track name directly in the location area of the portable telephone 12 in above—mentioned working examplebut. When a broadcasting station while broadcasting music is a single office in the specified broadcasting medium after specifying the kind of broadcasting mediumit may be made to display a track name on the portable telephone 12 directly. In this casethere is an advantage a display and operating of a broadcasting station name become unnecessary.

[0045] As mentioned above although working example of this invention was described in detail based on Drawingsthis is one embodiment to the last and this invention can be carried out in the mode which added various change and improvement based on a person's skilled in the art knowledge.

## **DESCRIPTION OF DRAWINGS**

[Brief Description of the Drawings]

[Drawing 1] It is a block diagram for explaining the hard structure of the track name retrieval device of one working example of this invention.

[Drawing 2] It is a figure explaining the contents of the membership database beforehand memorized in the track name retrieval device of drawing 1.

[Drawing 3] It is a figure explaining the contents of the broadcasting station data base beforehand memorized in the track name retrieval device of drawing 1.

[Drawing 4] It is a figure explaining the contents of the relay base office database beforehand memorized in the track name retrieval device of drawing 1.

[Drawing 5] It is a figure explaining the contents of the program database beforehand memorized in the track name retrieval device of drawing 1.

[Drawing 6] It is a figure explaining the contents of the contents database beforehand memorized in the track name retrieval device of drawing 1.

[Drawing 7] It is a functional block diagram explaining the important sectioni.e.the track name search service of a control facility of drawing 1. [ of a server ]

[Drawing 8] In order to specify the broadcasting medium which performs track name searchit is a figure showing the screen displayed by the broadcasting—medium displaying means of drawing 7.

[Drawing 9] In order to specify the broadcasting station which performs track name searchit is a figure showing the screen displayed by the broadcasting station name displaying means of drawing 7.

[Drawing 10] It is a figure showing the screen where the track name which is track name search results is displayed by the track name search displaying means of drawing 7.

[Drawing 11] It is a figure showing the screen where the words which are the information relevant to the searched track name are displayed by the track name search displaying means of drawing 7.

[Drawing 12] It is a diagram showing a part of flow chart explaining the important section of control actuationi.e. the track name search control actuation of a server of drawing 1.

[Drawing 13] It is a diagram showing other portions of the flow chart explaining the important section of control actuationi.e.the track name search control actuation of a server of drawing 1.

[Description of Notations]

- 10: Track name retrieval device
- 12: Portable telephone (communication terminal)
- 50: Broadcast program memory measure
- 52: Track name search access decision means
- 54: Search information storage means
- 56: Broadcasting-medium displaying means
- 60: Broadcasting station name search displaying means
- 64: Track name search displaying means
- 66: Single office judging means